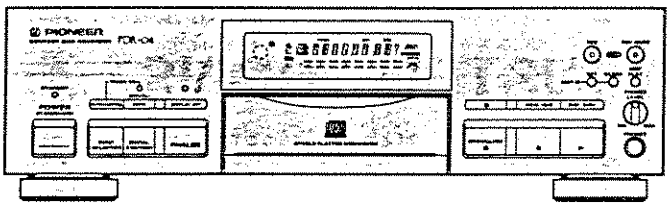
Operating Instructions

COMPACT DISC RECORDER

PDR-04

COMPACT disc DIGITAL AUDIO Recordable

SPARE PARTS MASTE



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

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PIONEER®
The Art of Entertainment

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.
RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.
HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.
FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.
CLEANING — The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.
ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.
WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
LOCATION – The appliance should be installed in a stable location.
NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION
- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.
HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

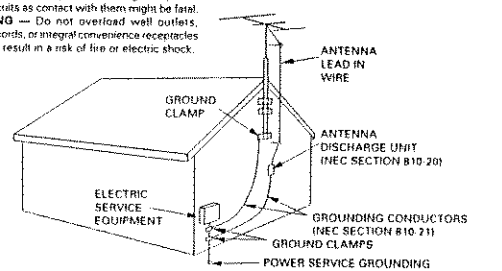

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

Fig. A

NEC — NATIONAL ELECTRICAL CODE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information to User
Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

CAUTION
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

CAUTION:
This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

[For Canadian model]
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

[Pour le modèle Canadien]
Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

POWER-CORD CAUTION
Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit on a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cord should be routed such a way that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord regularly. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for replacement.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

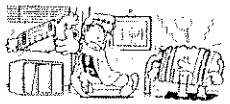
Once you have established a comfortable sound level:
- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

CAUTIONS REGARDING HANDLING

Location

Install the compact disc recorder in a well-ventilated location where it will not be exposed to high temperatures or humidity.
Do not install the compact disc recorder in a location which is exposed to direct rays of the sun, or near stoves or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the recorder in a damp or dusty environment may also result in a malfunction or accident. (Avoid installation near cookers etc., where the recorder may be exposed to oily smoke, steam or heat.)
Do not install the compact disc recorder on an unstable or inclined surface.



Precautions regarding installation

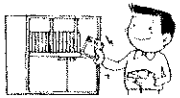
- Placing and using the compact disc recorder for long periods on heat-generating sources such as amplifiers will affect performance. Avoid placing the compact disc recorder on heat-generating sources.
- Install this compact disc recorder as far as possible from tuners and TV sets. A compact disc recorder installed in close proximity to such equipment may cause noise or degradation of the picture.
- Such noise may be particularly noticeable when an indoor antenna is used. In such cases, make use of an outdoor antenna, or turn off power to the compact disc recorder.
- Please place this unit on a level surface.

Cleaning the compact disc recorder

To clean the compact disc recorder, wipe with a soft, dry cloth. For stubborn dirt, wet a soft cloth with a mild detergent solution made by diluting one part detergent to 5 or 6 parts water, wring well, then wipe off the dirt. Also use a dry cloth to wipe the surface dry. Do not use volatile liquids such as benzene and thinner which are harmful to the unit.

Storing discs

- Discs are made of the same kinds of plastic used for conventional analog audio records. Be careful not to allow discs to warp; always store discs in their cases vertically, avoiding locations with high heat or humidity, or extremely low temperatures. Avoid leaving discs in cars, since the seat of a car in direct sunlight can become unbelievably hot.
- Always read and abide by the precautionary notes listed on disc labels.



Never move the unit during recording/playback

The disc rotates at a high speed during recording and playback. Do not lift or move the unit during these operations, otherwise the disc may be damaged or recording is impossible.

CD lens cleaner

The compact disc recorder's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, consult your nearest PIONEER authorized service center. Lens cleaners for compact disc recorders are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

Condensation

When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside, and the unit may not be able to attain its full performance. To prevent this, allow the unit to stand for about an hour or raise the room temperature gradually before switching it on.

Cleaning and handling compact discs

- The presence of fingerprints or smudges on the surface of the disc will not directly affect the recorded signals, but depending on the degree of contamination, the brightness of the light reflected from the signal surfaces may be reduced, causing degradation of sound quality. Always keep your discs clean by wiping them gently with a soft cloth from the inner edge toward the outer periphery.

- If a disc becomes very dirty, dip a soft cloth in water, and after wringing it out well, wipe the dirt away gently, and then remove any water drops with another soft, dry cloth. Wet discs cannot store recorded information.
- Do not use record cleaning sprays or anti-static agents on discs. Also, never clean discs with benzene, thinner, or other volatile solvents, since damage to the disc surface may result.

ON/STANDBY positions of the POWER switch

After the power cord of this unit is connected to an AC wall outlet, the power indicator goes on and off according to the setting of the POWER ON/STANDBY switch. However, note that a small amount of current flows even when the indicator is off. This current is used to back up the memory of the mode settings, etc. In this power standby mode, the power can be switched ON also using the provided remote control unit. When the unit is not to be used for a long period of time, be sure to remove the disc and unplug the power cord from the AC power outlet.

FEATURES

CD-R

This unit can be used to record signals on a CD-R (CD-Recordable) disc.
Once recorded, the signals on the CD-R disc cannot be erased later.
The CD-R disc provides high sound quality and excellent durability that are similar to an ordinary CD (Compact Disc).

CD-R and CD compatibility

Playback of CD-R and CD discs

This unit can be used to play a CD-R disc which has been partially recorded on, a CD-R disc which has been finalized and ordinary prerecorded CD discs.

Creation of CD-compatible discs

A CD-R disc can be played on any CD player just like ordinary prerecorded CD discs, provided that it has been finalized (by recording the TOC) after recording.

1-bit A/D converter

The A/D converter (analog-to-digital converter) of this unit uses the latest 1-bit conversion system. This system provides the following advantages compared to previous systems.

- Zero-cross distortion does not occur from the principle.
- Non-linear distortion does not occur throughout the frequency band.
- High accuracy is possible without adjustment.

These advantages preserve the original quality of the music including low-level signals.

3-beam differential push-pull pickup

The 3-beam pickup with a differential push-pull system stabilizes operations and reproduces rich medium and low frequencies.

Direct construction with minimized signal path and separated digital and audio

The direct construction reduces cross-interference between signals by achieving a correct signal transfer. It reproduces musical signals with high purity by thoroughly improving the distortion, channel separation and level linearity values. These improvements are not in terms of values at a single point but applied over a wide frequency range.

Digital-source synchro recording modes

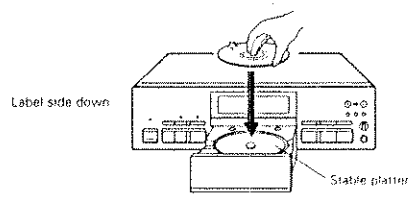
When recording digital signals from a CD or MD, the recording on this unit can be started and stopped in synchronism with the starting and stopping of the playback of the source component.
A mode for synchro recording of a single track from the above-mentioned sources is available so that edited recording is easy.

Easy Recording Operation

When an excessive signal with a music peak level above 0 dB is input during recording of analog input signals, the recording level is reduced automatically.

Stable platter mechanism ensures stable playback

The platter supports the whole disc surface to reduce resonance or sagging of the disc. This allows stable, powerful performance with resistance to load variations.



SPECIFICATIONS

1. GENERAL

Model ..... Compact disc audio system
Applicable discs ..... CDs and CD-Rs
Power supply ..... AC 120 V, 60 Hz
Power consumption ..... 16 W
Operating temperature ..... +5 °C to +35 °C
(+41 °F to +95 °F)
Weight (without package) ..... 5 kg (11 lb)
Max. dimensions ..... 420 (W) x 285 (D) x 125 (H) mm
16-9/16 (W) x 11-7/32 (D) x 4-15/16 (H) in.

2. AUDIO UNIT

Frequency characteristics ..... 2 Hz to 20 kHz
Playback S/N ..... 108 dB (EIAJ)
Playback dynamic range ..... 97 dB (EIAJ)
Playback total harmonic distortion ..... 0.004 % (EIAJ)
Playback channel separation ..... 96 dB
Recording S/N ..... 92 dB
Recording dynamic range ..... 92 dB
Recording total harmonic distortion ..... 0.005 %
Output voltage ..... 2 V
Wow-flutter ..... Less than measurement limit
((±0.001 % W.PEAK) (EIAJ))
Number of channels ..... 2 channels (stereo)
Optical output: ..... −15 to −20 dBm (wavelength: 660 nm)
Frequency deflection: Level 2 (standard mode)

* Recording specification values are for the LINE input (ANALOG).

3. INPUT JACKS

Optical digital input jack
Audio LINE input jack

4. OUTPUT JACKS

Optical digital output jack
Audio LINE output jack

5. RECORDING FUNCTIONS

- Recording
- Automatic digital-source synchro recording (1-track recording)
- Automatic digital-source synchro recording (All-track recording)
- EASY RECORDING OPERATION (ANALOG)
- REC MUTE
- AUTO TRACK INCREMENT
- AUTO REC/PAUSE
- Remaining recording time display
- PREVIOUS
- MANUAL TRACK INCREMENT
- INPUT SELECTOR
- TOC Write
- Fade-in/fade-out
- SCMS (Serial Copy Management System)
- Sampling monitor

6. PLAYBACK FUNCTIONS

- PLAY
- PAUSE
- STOP
- MANUAL search
- TRACK search
- Direct song selection
- 1-Track repeat
- All-track repeat
- Programmed repeat
- Programmed playback (max. 24 tracks)
- Program check
- Program correction
- Program clear
- Pause programming
- Program reservation
- SKIP playback
- DISPLAY OFF
- TIME display switching
- Random playback
- Fade-in/Fade-out

7. ACCESSORIES

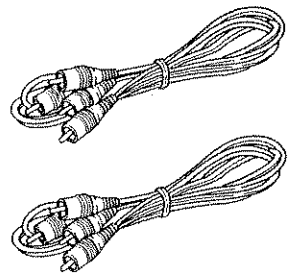
- Remote control unit (CU-PD083) 1
- Size AA/R6P dry cell batteries 2
- Audio cables 2
- Operating Instructions 1

NOTE:

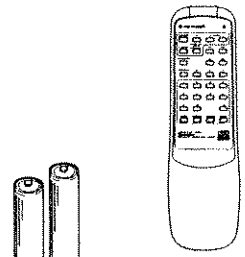
The specifications and design of this product are subject to change without notice, due to improvements.

CHECKING ACCESSORIES

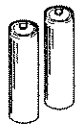
Audio cables ... x 2
(analog recording input, analog playback output)



Remote control unit



Operating instructions (this booklet)



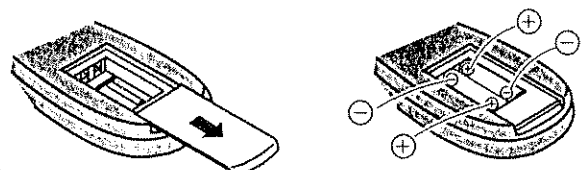
AA/R6P dry cell batteries ... x 2

Loading batteries into the remote control unit

Battery loading method

- Remove the battery cover on the rear, insert 2 batteries matching the polarities (⊕, ⊖) to the indications in the compartment and fit the cover to the original position.

Insert batteries according to the indications (⊕, ⊖) in the compartment.



Open battery cover.

<Caution on batteries>

- Load batteries with correct ⊕ and ⊖ orientations as indicated inside the battery compartment.
- Do not use new and used batteries together.
- Even when two batteries have the same shape, their rated output voltages may sometimes differ. Therefore, do not use different types of batteries together.

2 batteries (AA/R6P dry cell batteries)

- Some batteries are rechargeable while some are not. Read the instructions indicated on the batteries carefully before use.
- The battery life is about 6 months under normal use. When the remote control unit is not to be used for a long period (more than 1 month), be sure to remove the batteries.
- Should battery fluid leak, wipe the inside of the battery compartment well then load new batteries.

DISCS

Discs usable with this unit

- **CD-R disc**

■ When recording signals on a CD-R disc with this unit, be sure to use the disc carrying the following mark and indication (disc for consumer use).

COMPACT disc DIGITAL AUDIO Recordable

FOR CONSUMER or FOR CONSUMER USE

Recording is not possible on a CD-R disc without the above mark.
In countries where the copyright fee collection system has been established on the respective copyright laws, the copyright fee for discs carrying the mark and "FOR CONSUMER" or "FOR CONSUMER USE" indicator has already been paid to the copyright owner as defined in the copyright law, so that the user can record music on such discs for personal use. However, if you want to use a disc for any other purpose than personal use, you need to obtain permission from the copyright owner. Also note that the copyright laws are variable depending on the country; be sure to follow the copyright-related law in your country.

CD-R discs (disc for consumer use) are available from PIONEER.
RDD-60 (12 cm, 60 min.), RDD-60A (12 cm, 60 min.)
RDD-74A (12 cm, 74 min.)

- **CD disc**

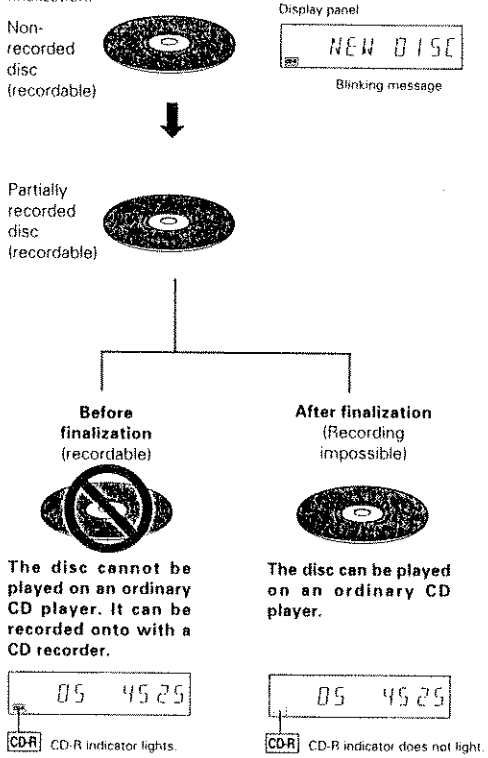
■ The CD disc used with this unit should be a disc carrying the following mark (Compact Disc - digital audio with optical recording).

COMPACT disc DIGITAL AUDIO

Notes on the copyright

- Broadcast programs, records, other recording media (music tapes, cassettes, CD discs, etc.) and musical performances are protected by the copyright law in your country just like the verse and melody of musical pieces.
- Therefore, the copyright law dictates that permission should be obtained from the copyright owner if you sell, transfer, distribute or lease a disc recorded from the above mentioned sources or if you use it in business (including background music in your store).

If it is desired to play a recorded CD-R disc on an ordinary CD player, the disc should be subjected to processing called finalization.

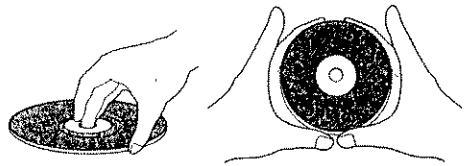

Non-recorded disc (recordable)
Display panel
NEW DISC
Blinking message
Partially recorded disc (recordable)
Before finalization (recordable)
After finalization (Recording impossible)
The disc cannot be played on an ordinary CD player. It can be recorded onto with a CD recorder.
The disc can be played on an ordinary CD player.
05 45 25
05 45 25
CD-R
CD-R indicator lights.
CD-R indicator does not light.

CAUTION

After finalization;
- additional recording is impossible.
- setting or clearing of skip IDs is impossible. (Refer to p. 23 of the Operating Instructions.)

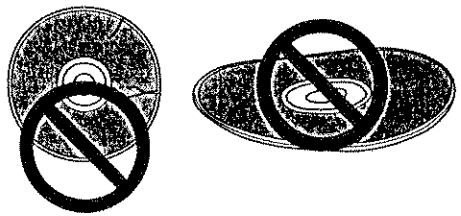
Handling of discs

■ When holding a CD-R or CD disc, be careful not to leave a fingerprint, dirt or a scratch on the signal-recording side. Hold the disc by placing your fingers on the edge or across the center hole and edge. A disc containing a fingerprint, dirt or a scratch can sometimes become unusable for recording or playback.



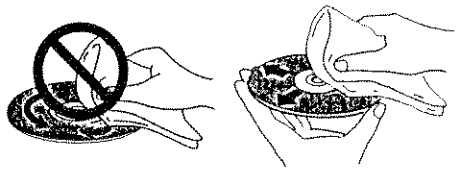
■ Be careful not to scratch the label side. A scratched disc can sometimes become unusable for recording or playback.

■ The disc rotates at a high speed inside the recorder. Do not attempt to use an abnormal disc (cracked disc, extremely warped disc, etc.).



■ Disc maintenance

- When a disc is stained with a fingerprint or dust, the signal recorded on the disc itself is not affected but such a stain could degrade the sound quality by reducing the brightness of the light reflected from the signal recording side. Therefore, always try to keep the disc surface clean. For cleaning, use a soft cloth which is either dry or dipped in alcohol and wipe gently from the center directly toward the edge.



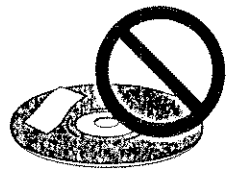
Do not wipe in a circular direction.

Wipe lightly from the center toward the edge

- For disc cleaning, it is recommended to use an optional disc cleaning kit.
- Do not use record spray or anti-static agent. Also take care that volatile chemicals such as benzine and thinner do not spill on the disc, for these substances may corrode the surface.

■ Disc storage

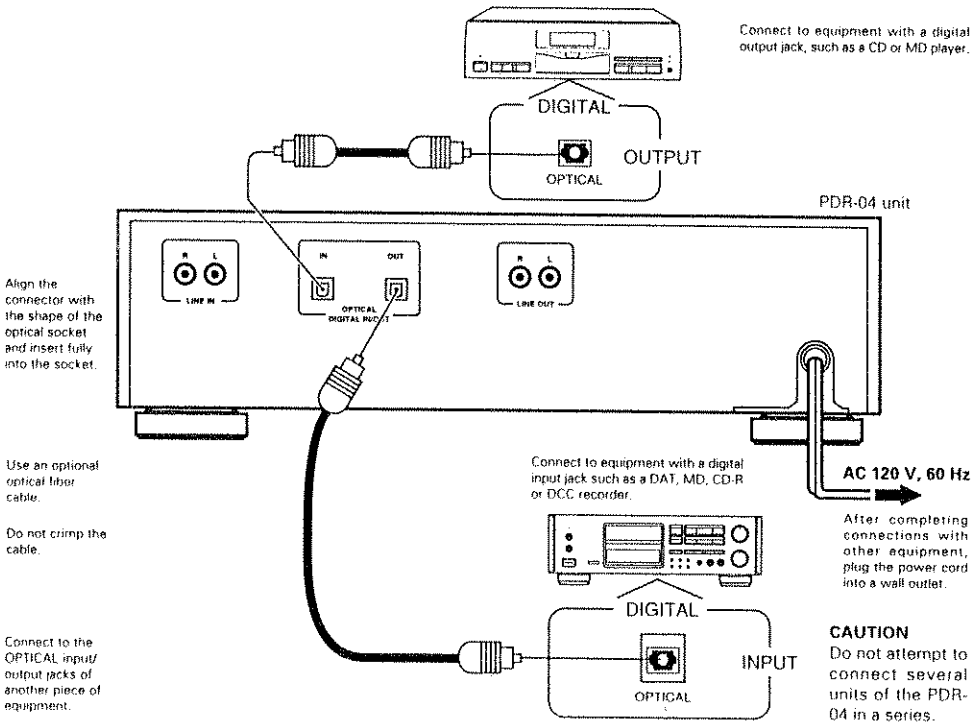
- The CD-R and CD discs are made of plastic material just like analog records. When storing a disc, take care so that it does not warp. Always put it in its case and stand the case upright and avoid places subject to direct sunlight, high temperatures, high humidity and extremely low temperatures. It is not recommended to leave the case on a car seat because the seat of a car in direct sunlight can become unbelievably hot.
- Be sure to read the instructions provided with the disc.
- Do not stick paper or seals on the label surface. Make sure the label surface is not scratched or damaged. Scratched or damaged surfaces may result in playback or recording failure. Use only a felt pen (or similar pen) to write on the label. Never use a writing instrument with a hard point (ballpoint pen, pencil, etc.), as this will damage the disc.



CONNECTION WITH OTHER EQUIPMENT (1) DIGITAL CONNECTION

■ Digital signal connection

(Before connecting this unit with other equipment, unplug the power cord from the wall outlet.)


Connect to equipment with a digital output jack, such as a CD or MD player.
DIGITAL
OUTPUT
OPTICAL
PDR-04 unit
Align the connector with the shape of the optical socket and insert fully into the socket.
Use an optional optical fiber cable.
Do not crimp the cable.
Connect to the OPTICAL input/ output jacks of another piece of equipment.
Connect to equipment with a digital input jack such as a DAT, MD, CD-R or DCC recorder.
AC 120 V, 60 Hz
After completing connections with other equipment, plug the power cord into a wall outlet.
DIGITAL
INPUT
OPTICAL

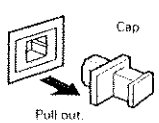
CAUTION
Do not attempt to connect several units of the PDR-04 in a series.

■ Caution in use of optical fiber cables

- Do not crimp an optical fiber cable, for this could damage the cable. Be specially careful when mounting the unit in a rack, etc. When an optical cable is stored in the form of a loop, the loop should have a diameter larger than 15 cm (6 in.).
- An optical cable should be inserted deep into the socket. Avoid incomplete connections.
- Use optical cables with a length of no more than 3 m (10 feet).
- Be careful not to leave dust on or scratch the optical fiber cable plugs. If the plug is dusty, wipe with a soft cloth before connection.
- When the optical fiber cables are not connected, protect the OPTICAL sockets on the rear of the unit against dust by inserting dust protective caps into them.

Optical sockets are delicate!!

- When the OPTICAL sockets are used, pull out the dust protective caps from them. Be sure to insert them again when the OPTICAL sockets are not to be used.
- Retain the dust protective caps for future use.



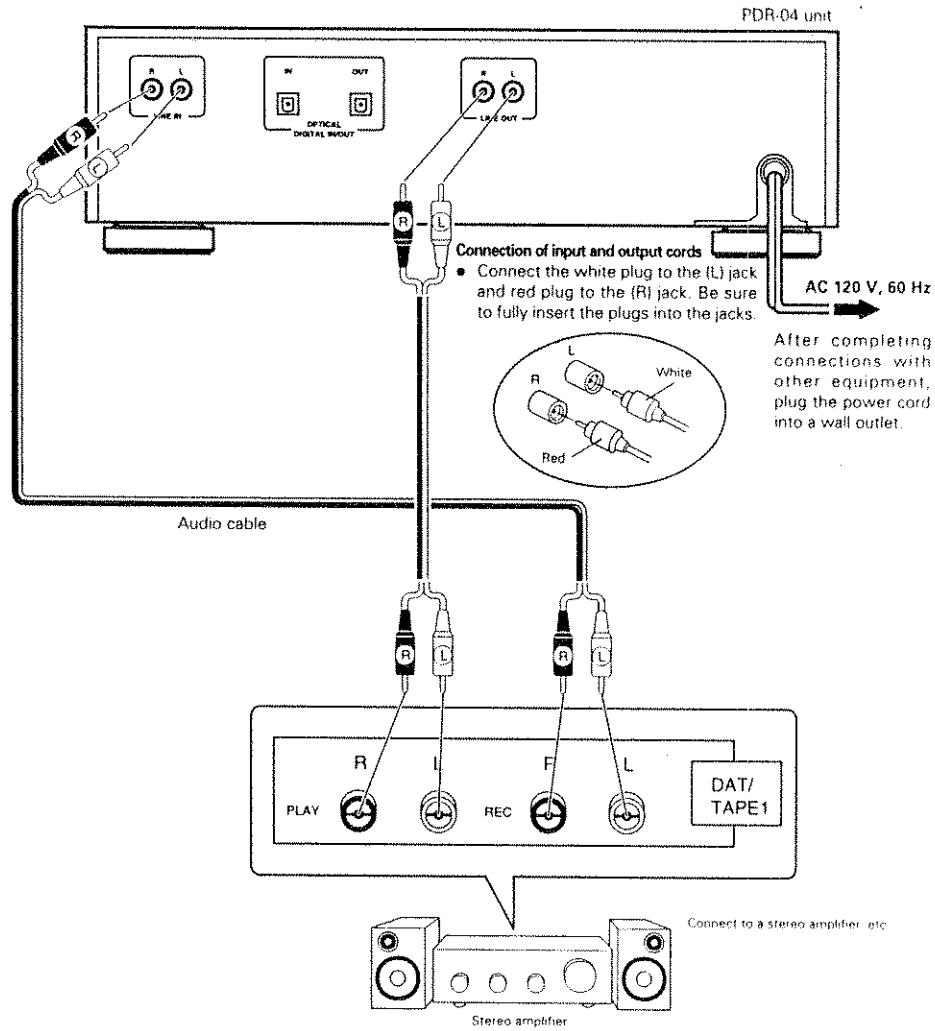
Connection of power cord

Household wall outlets are polarized.
In exceptional cases, mains hum might occur. This can be minimized by disconnecting the power plug and turning it over (to switch the plug polarity) before reconnecting it to the wall outlet.

CONNECTION WITH OTHER EQUIPMENT (2) ANALOG CONNECTION

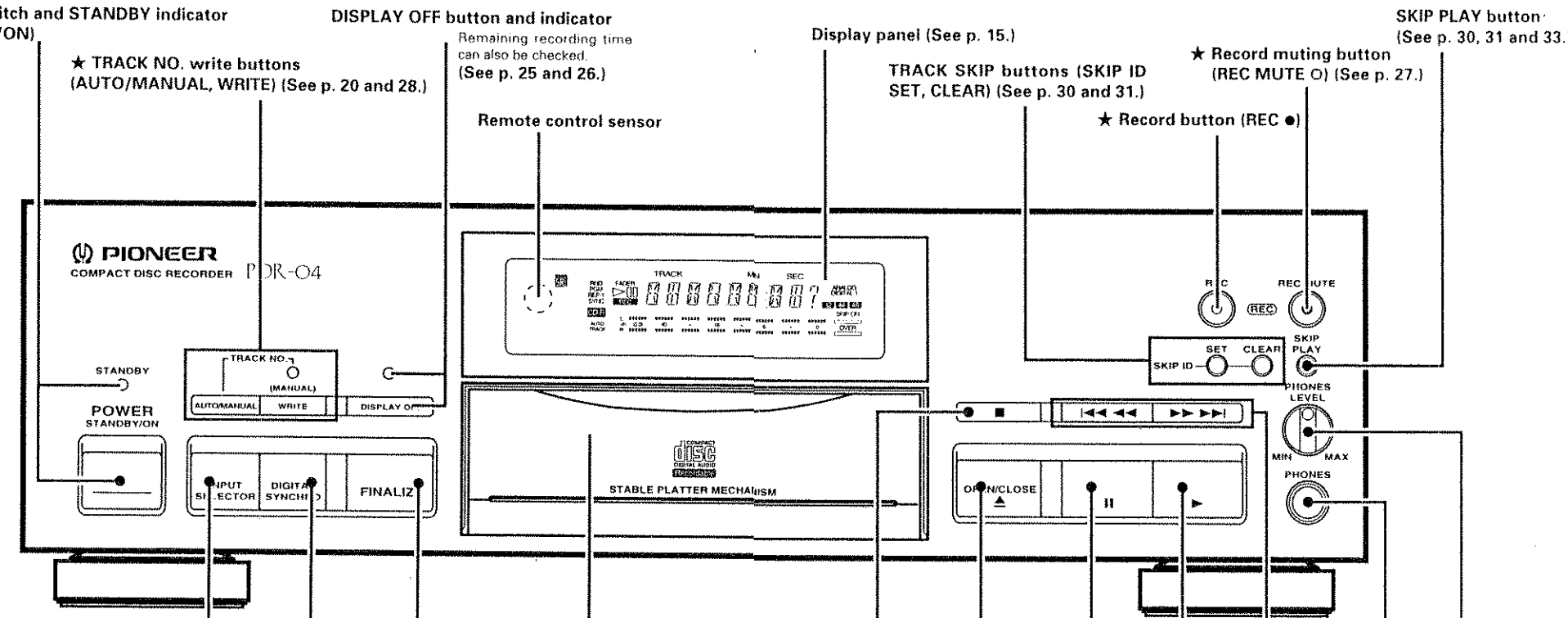
■ Analog signal connection

(Before connecting this unit with other equipment, unplug the power cord from the wall outlet.)


PDR-04 unit
Connection of input and output cords
• Connect the white plug to the (L) jack and red plug to the (R) jack. Be sure to fully insert the plugs into the jacks.
AC 120 V, 60 Hz
After completing connections with other equipment, plug the power cord into a wall outlet.
White
Red
Audio cable
PLAY
REC
DAT/ TAPE1
Connect to a stereo amplifier, etc.
Stereo amplifier

CONTROLS, CONNECTORS AND INDICATORS (FRONT PANEL)

The operations available using buttons marked ★ are also available using the buttons with the same names or inscriptions on the remote control unit. (See p. 14)



★ POWER switch and STANDBY indicator (STANDBY/ON)

★ TRACK NO. write buttons (AUTO/MANUAL, WRITE) (See p. 20 and 28.)

DISPLAY OFF button and indicator
Remaining recording time can also be checked.
(See p. 25 and 26.)

Remote control sensor

Display panel (See p. 15.)

TRACK SKIP buttons (SKIP ID SET, CLEAR) (See p. 30 and 31.)

★ Record muting button (REC MUTE ○) (See p. 27.)

★ Record button (REC ●)

SKIP PLAY button (See p. 30, 31 and 33.)

INPUT SELECTOR button
Also for monitoring input
(See p. 17.)

DIGITAL SYNCHRO button
(See p. 18 and 19.)

FINALIZE button
(For TOC recording)
(See p. 23.)

Disc tray

★ Stop button (■)

★ Pause button (II)

OPEN/CLOSE button (▲)

★ Play button (►)

Headphone jack (PHONES)

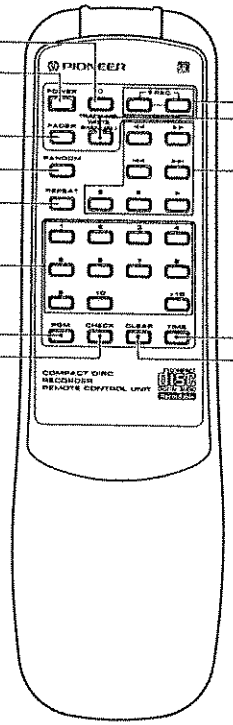
Headphone level control (PHONES LEVEL)

★ Track search buttons (|◄◄/►►|) (See p. 25.)
★ Manual search buttons (◄◄/►►)(See p. 25.)

CONTROLS, CONNECTORS AND INDICATORS (REMOTE CONTROL UNIT)

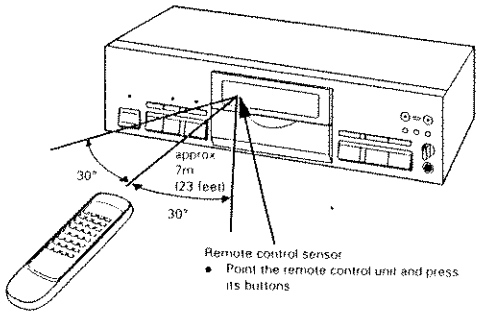
Functions of the remote control unit

* Operations performed by buttons marked ★ can also be carried out by using buttons with the same name on the main unit. (See p. 12, 13)



★ Record muting button (O)
★ POWER button
FADER button (See p. 27 and 32)
RANDOM button (See p. 32)
REPEAT button (See p. 32)
Numeric buttons (1 to 10, >10)
Program button (PGM) (See p. 34)
Program check button (CHECK) (See p. 35)
★ Record buttons (● REC)
NOTE: For recording, press the 2 buttons simultaneously.
★ Manual TRACK NO. WRITE button (MANUAL)
★ Manual search buttons (◄◄/►►)
★ Track search buttons (I◄◄/►►I)
★ Stop button (■)
★ Pause button (II)
★ Play button (►)
TIME button (See p. 15)
Program clear button (CLEAR) (See p. 35)

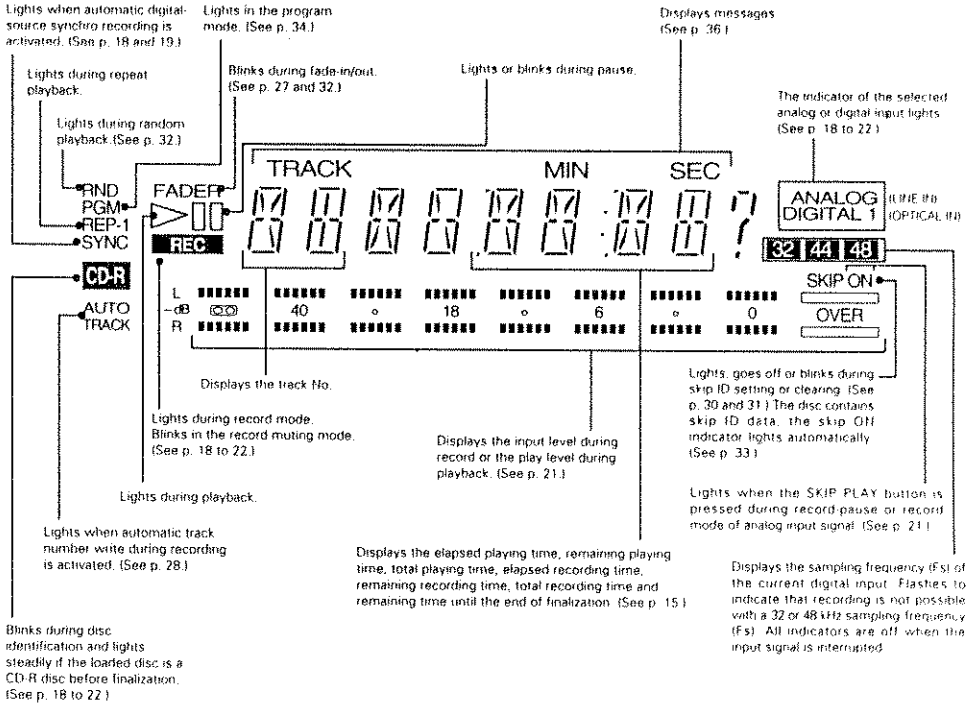
■ Remote controllable range



Caution on the remote control operation

- Remote control may be impossible if there is an obstacle between the remote control unit and main unit or if the remote control unit is operated at too great of an angle from the remote control sensor.
- Erroneous operation may occur if strong light such as direct sunlight or fluorescent lamp light is incident to the remote control sensor.
- The main unit may operate erroneously if it is used near equipment radiating infrared rays or if the infrared remote control unit of other equipment is used near the unit. On the contrary, if this remote control unit is operated near another piece of equipment which can be controlled with infrared rays, the equipment may operate erroneously.
- Replace batteries when the remote controllable range decreases noticeably.

DISPLAY PANEL


Lights when automatic digital-source synchro recording is activated. (See p. 18 and 19.)
Lights in the program mode. (See p. 34.)
Displays messages (See p. 36.)
Lights during repeat playback.
Blinks during fade-in/out. (See p. 27 and 32.)
Lights or blinks during pause.
The indicator of the selected analog or digital input lights. (See p. 18 to 22.)
Lights during random playback. (See p. 32.)
TRACK
MIN
SEC
RND
PGM
REP-1
SYNC
FADER
REC
ANALOG
DIGITAL 1
(LINE IN)
(OPTICAL IN)
32 44 48
CD-R
AUTO TRACK
L
dB
R
40
18
6
0
SKIP ON
OVER
Displays the track No.
Lights during record mode. Blinks in the record muting mode. (See p. 18 to 22.)
Displays the input level during record or the play level during playback. (See p. 21.)
Lights, goes off or blinks during skip ID setting or clearing. (See p. 30 and 31.) The disc contains skip ID data, the skip ON indicator lights automatically. (See p. 33.)
Lights during playback.
Lights when the SKIP PLAY button is pressed during record-pause or record mode of analog input signal. (See p. 21.)
Lights when automatic track number write during recording is activated. (See p. 28.)
Displays the elapsed playing time, remaining playing time, total playing time, elapsed recording time, remaining recording time, total recording time and remaining time until the end of finalization. (See p. 15.)
Displays the sampling frequency (Fs) of the current digital input. Flashes to indicate that recording is not possible with a 32 or 48 kHz sampling frequency (Fs). All indicators are off when the input signal is interrupted.
Blinks during disc identification and lights steadily if the loaded disc is a CD-R disc before finalization. (See p. 18 to 22.)

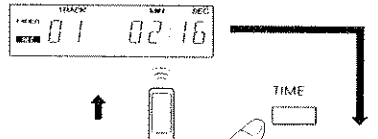
Switching the time display (Remote control unit)

The following operation allows you to check the recording time information during recording or playing time information during playback. Every time the TIME button of the remote control unit is pressed, the time information contents are switched in order of A → B → C → D

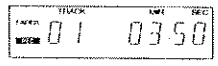
The display mode varies depending on whether the current operation is recording or playing back (in order of A → B → C during recording)

During recording

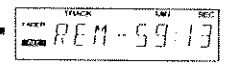
A: Elapsed recording time (2 min. 16 sec. after the start of track No. 1)



C: Total recording time (3 min. 50 sec. of 1-track recording)



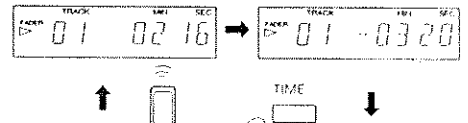
B: Remaining recording time (59 min. 13 sec. remaining on the disc)



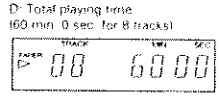
During playback

A: Elapsed playing time (2 min. 16 sec. after the start of track No. 1)

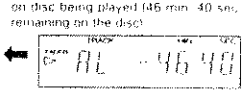
B: Remaining playing time of track being played (3 min. 20 sec. remaining for track No. 1)



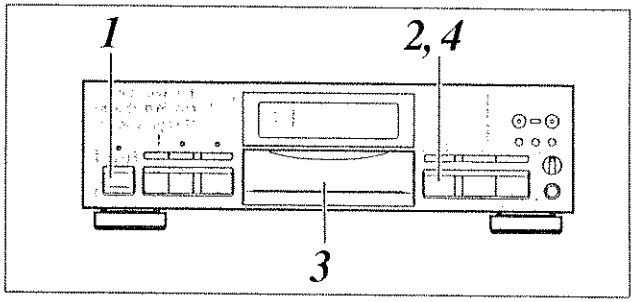
D: Total playing time (60 min. 0 sec. for 8 tracks)



C: Remaining playing time of all tracks on disc being played (46 min. 40 sec. remaining on the disc)

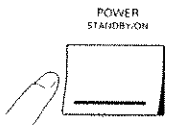


DISC LOADING/UNLOADING



Loading/unloading a disc

1 **Turn the power ON.**



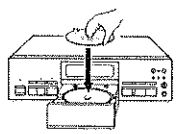
The display panel is illuminated.

2 **Open the disc tray.**

"OPEN" is displayed and the tray comes out

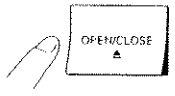
3 **Place a disc.**

- **Label side down.**



- After recording or skip information recording, it takes a few seconds before the disc can be unloaded because the recording information is written on the disc. "OPEN" blinks in this period.

4 **Close the disc tray.**

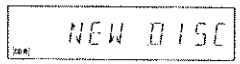


"CLOSE" is displayed and the tray is closed

The disc tray can also be closed by:
- pressing the play (►) button.
- pushing the disc tray lightly.

- When a disc is loaded, the disc type is identified and the information on the disc is read out. (In this period, "CD?" and "CD-R?" are displayed alternately.)

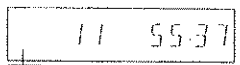
Display for a non-recorded CD-R disc:



Display for a partially recorded CD-R disc:

The total recording time is displayed.

Display for a prerecorded CD or finalized CD-R disc:



CD-R Not displayed

The total playing time is displayed.

An attempt is made to start playback without loading a disc:

MODES OF RECORDING

This section introduces the summary of the modes of recording available with this unit.

- **It is recommended to use the automatic digital-source synchro recording when recording a CD or MD source.**
  The track numbers are updated automatically by this unit.

For details, also refer to the corresponding descriptions.

This unit provides four modes of recording on CD-R discs.
Select a mode according to the source recorded.

Automatic digital-source synchro recording (1-track) ..... When the source equipment starts to play, only one track is recorded automatically and the recording stops automatically after that track. This mode is convenient for edited recording of a CD or MD. (Refer to page 18 for the recording set-up procedure.)

Automatic digital-source synchro recording (all-track) ..... When the source equipment starts to play, all tracks are recorded automatically and the recording stops automatically after the last track. This mode is convenient for recording an entire CD or MD. (Refer to page 19 for the recording set-up procedure.)

Manual digital-source recording ..... This mode is mainly used for recording the output from digital sources. Recording is started or stopped manually. (Refer to page 22 for the recording set-up procedure.)

Analog-source recording ..... This mode is used for recording the line output of the source equipment. Digital recording is not possible if the sampling frequency (Fs) is 32 or 48 kHz (DCC, DAT, BS, etc.) In this case, use analog recording. (Refer to page 20 for the recording set-up procedure.)

NOTE:
Digital recording is only possible when the sampling frequency (Fs) is 44.1 kHz (CD or MD). Digital recording is possible from DCC and DAT sources that output a 44.1 kHz sampling frequency (Fs).
When recording is activated immediately after turning power ON, it may take a relatively long period until the unit enters record-pause mode because the unit requires a certain time for warming up (approx. 1 minute).

The recorded input can be monitored.

One of the ANALOG and DIGITAL 1 indicators corresponding to the selected input lights up.

When the input is selected, the input source equipment name is displayed as "INPUT" → "CD" → "MONI" (only from digital input).
- This display is available if the input source is a CD, MD, DAT or DCC.
- Before recording from Laser disc, make sure that this unit's sampling frequency indicator lights in the display. Digital recording is not possible if this indicator does not light. Check the source with the record monitor.
- When recording from digital sources like CD, CDV, or LD players, the input source display may display "CD."
- The recording level is set automatically in the recording of analog signals.

CAUTION

This unit is a recorder for writable discs.
Recording is possible on discs carrying the mark and "FOR CONSUMER" or "FOR CONSUMER USE" indication. The CD-R indicator lights when a CD-R (Compact Disc - Recordable) disc is loaded. Recording on a disc which has been partially recorded starts from the point where the previous recording has been stopped. The CD-R disc is recordable once and cannot be erased once it has been recorded.

In the following cases, recording is impossible even when the REC or DIGITAL SYNCHRO button is pressed.
When the CD-R indicator is not lit, input monitoring is started by pressing the button.
When there is no remaining recording time, "REC FULL" is displayed.
When 99 tracks have already been recorded, "REC FULL" is displayed. (No more recording is possible.)

When a disc without the mark and "FOR CONSUMER" or "FOR CONSUMER USE" indication is loaded, "Pro DISC" is displayed and recording is impossible (CD-R disc for other purpose than CD recorder).

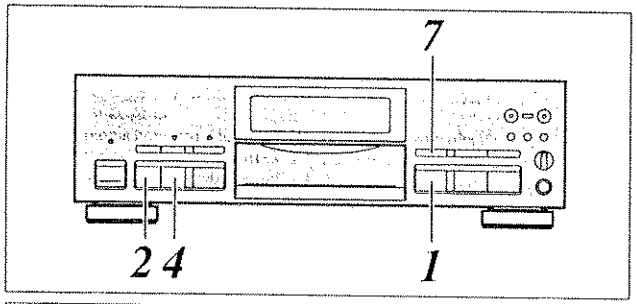
When a CD-R disc is inserted, the unit automatically performs a series of adjustments designed to provide the best possible recording.
It may take some time to complete the automatic adjustments if the unit is cold when the power is turned on.
Please wait for the unit to enter the record standby mode.

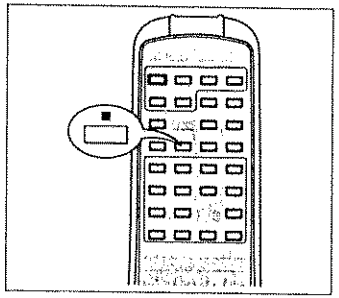
RECORDING (1) – AUTOMATIC DIGITAL-SOURCE SYNCHRO RECORDING

1-TRACK RECORDING

This function is convenient for track-by-track edited recording of a CD or MD.

The following procedure allows you to perform automatic digital-source synchro recording.



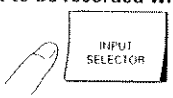


- Connect the digital input/output properly as indicated (on page 10).

1 **Load a CD-R disc containing a recordable space.**

- After loading the disc, check that the CD-R indicator stops blinking and starts to light steadily.
  In case it does not light steadily or a character display (such as "Pro DISC") appears, refer to page 38.

2 **Select the input to be recorded with the INPUT SELECTOR.**

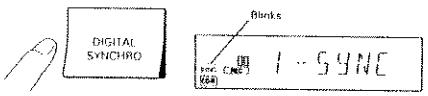


- Select DIGITAL 1.
  The ANALOG input cannot be recorded with this function.

3 **Ensure that the source player is not playing (in stop or pause mode). (This function cannot be activated if the source is being played.)**

- Confirm the track to be recorded before recording.

4 **Press the DIGITAL SYNCHRO button.**



- Wait until the SYNC indicator blinks.
- Do not start the playback of the source player until the SYNC indicator starts to blink.

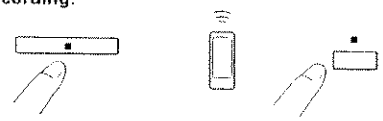
5 **Start playing the source player.**
This unit starts recording automatically.

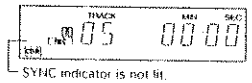
- This unit enters record-pause mode after 1-track recording.
- When the unit stands by for the source playback in record-pause mode of 1-track synchro recording, or when the unit is recording the source sound with 1-track synchro recording, or when digital input is interrupted during synchro recording of a single track or when the source is switched to a source with which synchro recording is not possible, the synchro recording is canceled and the unit enters record-pause mode.

6 **If it is required to record another track after 1-track recording, repeat steps *3* to *5* again.**

- Press the stop (■) button if you want to end recording.
- If the SYNC indicator is not lit after 1-track synchro recording, the track to be recorded next can be confirmed on the source player. (Automatic recording cannot be started while the SYNC indicator is not lit.)

7 **After recording the desired tracks, press the stop (■) button to end recording.**



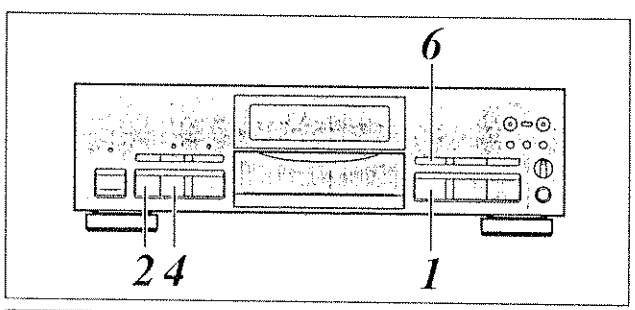


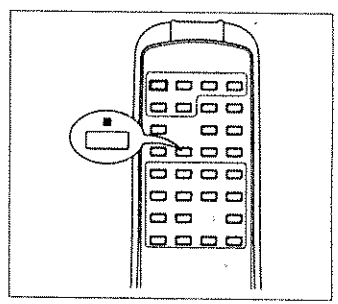
SYNC indicator is not lit.

RECORDING (1) – AUTOMATIC DIGITAL-SOURCE SYNCHRO RECORDING

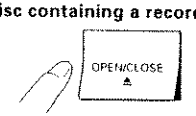
ALL-TRACK RECORDING

This function is convenient for recording of an entire CD or MD.





1 **Load a CD-R disc containing a recordable space.**



- After loading the disc, check that the CD-R indicator stops blinking and starts to light steadily.
  In case it does not light steadily or a character display (such as "Pro DISC") appears, refer to page 38.

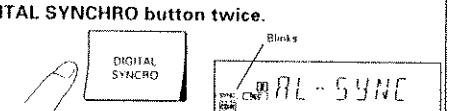
2 **Select the input to be recorded with the INPUT SELECTOR.**

- Select DIGITAL 1.
  The ANALOG input cannot be recorded with this function.

3 **Ensure that the source player is not playing (in stop or pause mode). (This function cannot be activated if the source is being played.)**

- Confirm the track to be recorded before recording.

4 **Press the DIGITAL SYNCHRO button twice.**

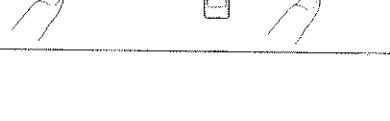


- Do not start the playback of the source player until the SYNC indicator starts to blink.
- Every time the DIGITAL SYNCHRO button is pressed, the mode is changed in order of 1-SYNC → AL-SYNC → Record pause mode.
  Select "AL-SYNC" when all-track recording is required.

5 **Start playing the source player.**
This unit starts recording automatically.

- When the unit stands by for the source playback in record-pause mode of all-track synchro recording, or when the unit is recording the source sound with all-track synchro recording, or when digital input is interrupted during synchro recording of a single track or when the source is switched to a source with which synchro recording is not possible, the synchro recording is canceled and the unit enters record-pause mode.

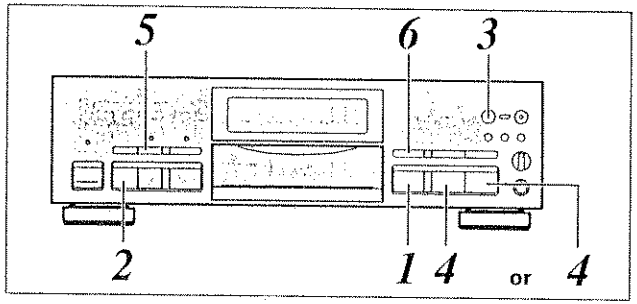
6 **After recording, press the stop (■) button to end recording.**

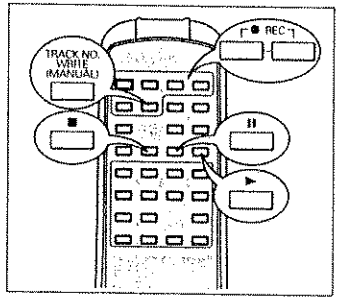


- "AL-SYNC" is displayed again after playback.
  Be careful not to restart playback of the source player under this condition, for this will start the recording again.
  Press the stop (■) button if you want to end recording.

RECORDING (2) – ANALOG-SOURCE RECORDING

This function is for recording the analog output of analog record stable platter or compact cassette deck.



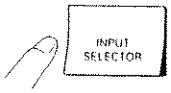


- Connect the analog input/output properly as indicated (on page 11).

1 **Load a CD-R disc containing a recordable space.**

- After loading the disc, check that the CD-R indicator stops blinking and starts to light steadily.
  In case it does not light steadily or a character display (such as "Pro DISC") appears, refer to page 38.

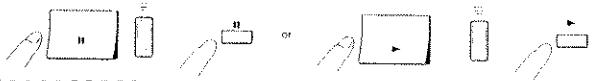
2 **Select the ANALOG input with the INPUT SELECTOR.**



3 **Press the REC ● button(s).**

- This unit enters record-pause mode.
  When the source is played in this step, the recording level is set automatically. Play the section of the source with the maximum level in order to set the optimum recording level. After having played the section with the maximum level, return to the position you want to start recording.
- If the source volume is extremely low, press the SKIP PLAY button during record-pause or record mode to increase the recording level. (Refer to page 21.)

4 **Press the pause (II) or play (►) button.**

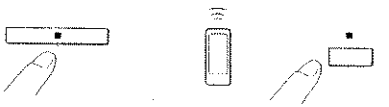


- Start playback of the source player after having started the recording of this unit.
- In case the recording level becomes excessive during recording, the level is reduced automatically.

5 **Press the (MANUAL) WRITE button.**
(Press if it is required to renew the track numbers.)

- Press the (MANUAL) WRITE button if you want to renew the recorded track numbers during recording or between tracks. (For details, refer to page 28.)

6 **After recording, press the stop (■) button to end recording.**



- Pressing the stop (■) button resets the set recording level. Therefore, press the pause (II) button if you do not want to reset the set recording level, for example when it is required to record the same source again. The unit enters record-pause mode when the pause (II) button is pressed.

- In the analog source recording, the automatic recording level setting is possible also during monitoring. The recording level can be set automatically by playing the section with the maximum level during monitoring. When the REC ● button is pressed now, the unit enters record-pause mode with the recording levels set above.

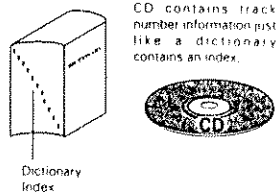
RECORDING (2) – ANALOG-SOURCE RECORDING

Caution on analog-source recording

1. When the ANALOG input is selected with the INPUT SELECTOR button, the track numbers are written in the manual write mode.
   This mode is indicated by the lighting of the red lamp above the (MANUAL) WRITE button.
   Press the (MANUAL) WRITE button whenever you want to renew the track number (for example, between tracks).

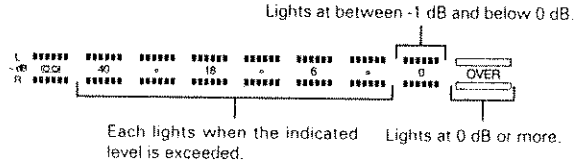
Track number write operation

Ordinary CD-digital audio contains the recording of track numbers so desired tracks can be selected and played. When recording with a CD-R recorder, however, you need to write the track numbers yourself. When recording from digital sources containing track number information (such as a CD or MD), a new track number is recorded automatically when this unit detects a change in track number information and sound from the digital source. In case of recording of a source which does not contain track number information such as an analog source, you must write a new track number by yourself between tracks. **(Be specially sure not to forget this for it is not possible to add track numbers once recording has completed.)**
For the track number write operation procedure, refer to page 28.



Level meter

The level meter segments light to indicate the input level during recording or play level during playback.



Notes on the automatic recording level setting

The recording level is reduced automatically when the input level of the line input (analog source) has been excessive continuously.
The OVER level indicator may light temporarily, but this does not cause trouble in recording.
It is recommended to play the section which may contain the highest level in the source in record-pause mode before starting recording (because the recording level is set automatically according to the highest level in this period).
If the recording level of the entire source is very low, press the SKIP PLAY button in record-pause mode to increase the recording level. The ON segment lights up for about 2 seconds when the button is pressed. (See page 15.)

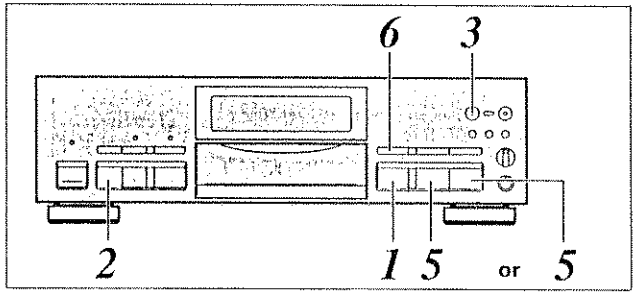
Canceling the automatically-set recording level

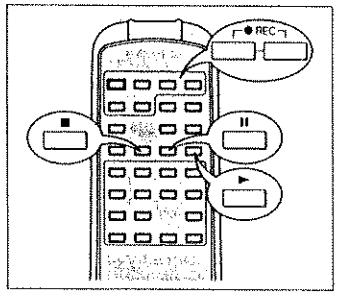
Press the stop (■) button to reset the recording level. When the INPUT SELECTOR button is pressed, the recording level is also reset.

RECORDING (3) – MANUAL DIGITAL-SOURCE RECORDING

This function is for recording the digital output of digital sources other than CD or MD.

(It is recommended to use the automatic digital-source synchro recording when recording signals from a CD or MD.)





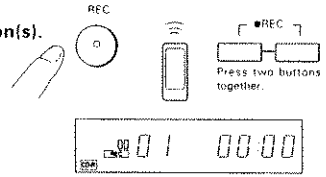
1 **Load a CD-R disc containing a recordable space.**

- After loading the disc, check that the CD-R indicator stops blinking and starts to light steadily.
  In case it does not light steadily or a character display (such as "Pro DISC") appears, refer to page 38.

2 **Select the input to be recorded with the INPUT SELECTOR.**

- Select DIGITAL 1.

3 **Press the REC ● button(s).**



- This unit enters record-pause mode.
- Wait until the time information is displayed.

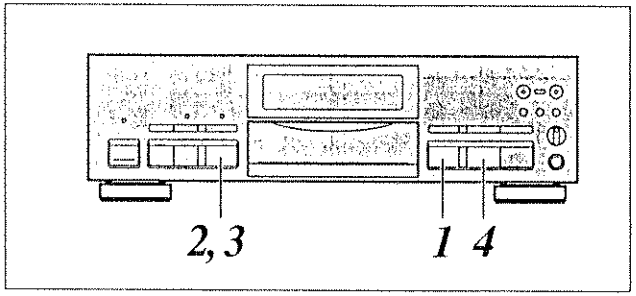
4 **Start playing the source player to check whether recording of that source is possible.**

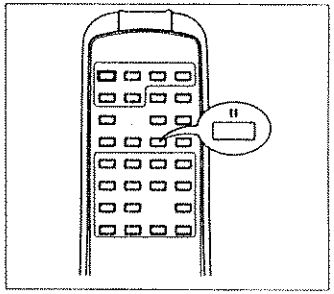
- In case digital input is not input, or a signal based on a sampling frequency which cannot be recorded is input, "CAN NOT REC" is displayed and recording does not start. (Refer to pages 10 and 17.)
  In case a record inhibit signal as defined by SCMS is detected, "CAN NOT COPY" is displayed and recording does not start. (Refer to pages 29 and 38.)

5 **Press the pause (II) or play (►) button. When recording starts, start playing the source player.**

6 **After recording, press the stop (■) button to end recording.**

MAKING A RECORDED DISC PLAYABLE ON A CD PLAYER (FINALIZATION)





What is finalization?

- Finalization is the final processing for making a CD-R disc which has been recorded playable on ordinary CD players.
- Once a disc is finalized, skip ID setting/clearing is impossible on the disc; be very careful.
- Never cut the power supply during finalization, for this may lead to disc damage.

Finalization procedure

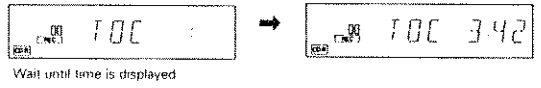
1 **Load a CD-R disc which has been recorded on.**

- Ensure that there is no scratch, dust or stain on the disc.
  If the disc is dusty or stained, clean it by referring to "Disc maintenance" on page 9.

2 **Press the FINALIZE button. The unit enters record-pause mode.**

- If finalization is not required, press the stop button. finalization will be aborted.
- The procedure is canceled automatically when "FINAL ?" has been displayed for about 1 minute or more.

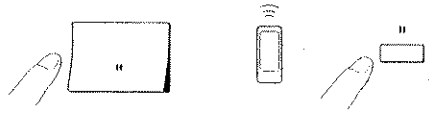
3 **If finalization is required, press the FINALIZE button again. Then wait until time information is displayed.**



Wait until time is displayed

- The displayed time varies depending on discs.
- **The procedure is canceled automatically when the unit has remained in record-pause mode for about 10 minutes or more.**

4 **Press the pause (II) button to start the procedure. Finalization starts now.**

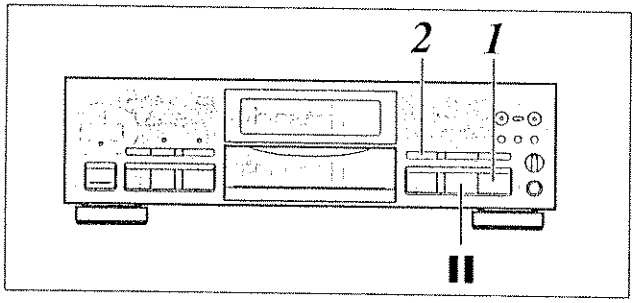


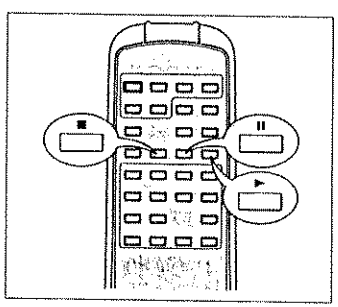
- The remaining time until the completion of finalization is displayed during finalization.
- It usually takes about 4 minutes until the finalization completes.
- When finalization is completed normally, the CD-R indicator goes out and the unit enters stop mode automatically.

CAUTION:

- **Once finalization is started, no operation button (other than stop (■)) is accepted until the finalization completes.**
- **If a scratched, stained or dusty disc is subjected to finalization, the finalization may sometimes not complete.**
  In case finalization does not complete in about 10 minutes from the start, it can be forced to be aborted by pressing the stop (■) button. But such a disc cannot be played on ordinary CD players.
- **Never unplug the power cord during finalization.**
  If the power supply is interrupted due to power failure or by mistake during finalization, the remaining finalization resumes as soon as the power supply is recovered. In this case, "RESUME" is displayed until the finalization is completed. (Note that the disc finalization may not resume properly in some cases.)

PLAYBACK

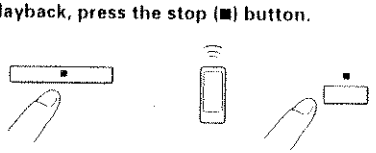




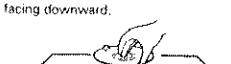
Starting playback

1 **Press the play (►) button.**

2 **To stop playback, press the stop (■) button.**



Place the disc on the turntable with the label side facing downward.



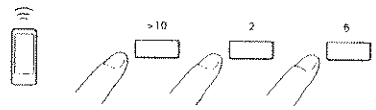
- Press the **pause (II)** button to pause playback temporarily.
- To end pause and restart playback, press the play (►) or **pause (II)** button.
- **The procedure is canceled automatically when the unit has remained in pause mode for about 10 minutes.**

Playing from the desired track (Direct track selection)

Select the desired track with the numeric buttons of the remote control unit.

(Example) To select track No. 26

- Press in order of (>10), (2) and (6).

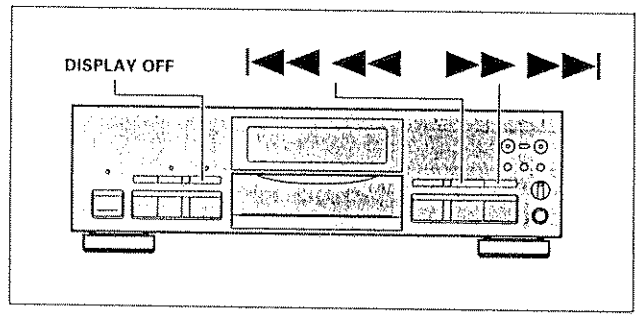


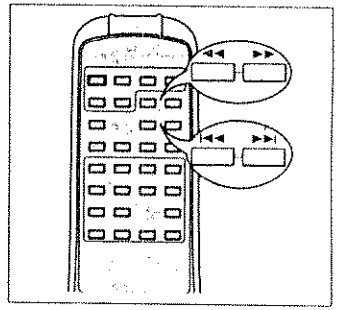
- To select track No. 1 to 10, simply press the corresponding button.
- To select track No. 11 or higher, press the >10 button first.
- A higher track No. than the total number of tracks on the disc cannot be selected.

NOTE

When selecting a track number, press numeric buttons at intervals of less than 5 seconds.

PLAYBACK

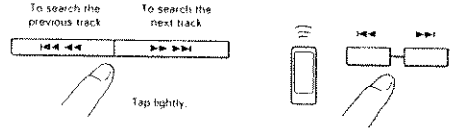




Each of the [|◄◄ ◄◄] and [►► ►►|] buttons of the main unit provides two functions, as a track search button and manual search button.

Searching an adjacent track (Track search)

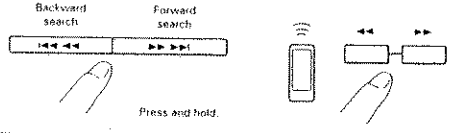
Press the track search button (|◄◄ or ►►|).



- Pressing ►►| during playback (including programmed playback) or when playback is paused or stopped skips the played position to the beginning of the next track. To skip to a track located after the next track, press ►►| of the main unit for the required number of times or press and hold ►►| of the remote control unit. When programmed playback is activated, pressing ►►| skips to the next track in the program.
- Pressing |◄◄ skips the played position to the beginning of the current track. To skip to a track located before the current track, press |◄◄ of the main unit for the required number of times or press and hold |◄◄ of the remote control unit. When programmed playback is activated, pressing |◄◄ skips to the previous track in the program.

Searching the desired point (Manual search)

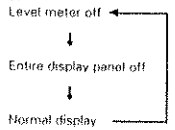
Press and hold the manual search button (◄◄ or ►►).



- Pressing and holding ►► of the main unit during playback (including programmed playback) or when playback is paused moves the played position in the forward direction at a high speed. With the remote control unit, pressing and holding ►► during playback (programmed playback) or pause mode moves the played position in the forward direction at a high speed.
  When a disc has been searched until the end, "[ ]" is displayed and the unit enters pause mode, which can be released by pressing ◄◄.
  Pressing and holding ◄◄ moves the played position in the reverse direction at a high speed. When a disc has been searched in the reverse direction until the beginning, the unit enters play mode.
- During programmed playback, only the current track being played can be searched in the forward or reverse direction. When the current track has been searched in the forward direction until the end, the unit enters pause mode at the position immediately before the next track; press the play (►), **pause (II)** or ◄◄ button to release the pause mode. When the current track has been searched in the reverse direction until the beginning, programmed playback restarts from the position immediately before returning to the previous track.

Turning the display off:

The information on the displayed panel can be turned off during playback.
Press the DISPLAY OFF button.
Each press of the DISPLAY OFF button changes the display condition as follows.



- Even in DISPLAY OFF, the display will turn on for a few seconds when an operation button is pushed.
- When you press the TIME button on the remote, the display comes on for a few seconds so you can check the track information.
- The display cannot be turned off during recording, even if you press DISPLAY OFF.
- The display will not turn off during pause, even if you press DISPLAY OFF (it will, however, turn off once playback/recording is resumed).
- Pressing DISPLAY OFF during recording allows you to check the remaining recording time.

CONVENIENT FUNCTIONS FOR RECORDING (1)

■ Recording on a partially recorded disc

If a CD-R disc before finalization has some remaining recording time left and the total number of tracks which have been recorded is below 99, recording can be restarted from the position after the last recorded track.
Follow one of the recording procedures described on pages 18 to 22.

■ Checking the remaining recording time

Press the DISPLAY OFF button in record or record-pause mode to display the remaining recording time on the disc.

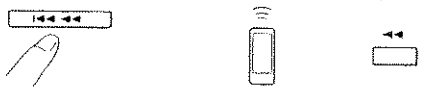
- The previous information is displayed again in about 5 seconds.

■ Checking the recording condition and recording end point before recording on a partially recorded disc

1 **Press the REC ● button(s) to initiate the record-pause mode.**

If you need to use automatic digital-source synchro recording, press the DIGITAL SYNCHRO button so that the synchro recording standby display appears.

2 **Press and hold the reverse manual search button.**
The played position is moved backward and reverse play sound is heard while the button is held depressed.
When the button is released, the previous recording is played until the end point, where the unit enters record-pause mode again.



- Holding the button depressed allows you to move the played position backward by about 2 minutes from the recording end point.
- Pressing the REC button during playback puts the unit back to record-pause mode again.
- Pressing the ▶▶ ▶▶| button of the main unit or ▶▶ button of the remote control unit allows forward track search of the recording end point or manual search.
- The ■ indicator turns off during playback until the recording end point.

Caution in case the power supply is cut off during recording

Never turn the power supply off during recording.
Be always sure to remove the disc before turning the power of the unit off.

In case the power supply is interrupted due to power failure or unplugging of the power cord by mistake during recording; the last part of the recording will not be possible.
In this case, "RESUME" is displayed until recording is possible again.

Caution in case the digital input is interrupted during recording

In case the sampling frequency from the digital signal is switched during recording, the digital signal line is disconnected or the power supply of the source player is cut off and if the digital signal is recovered in less than about 5 seconds, recording is continued while recording a non-recorded blank in this period. If the digital signal is not recovered in 5 seconds or more, recording is interrupted and "CAN NOT" and "REC" are displayed; recording restarts when the digital audio signal is input after the recovery of the digital signal.

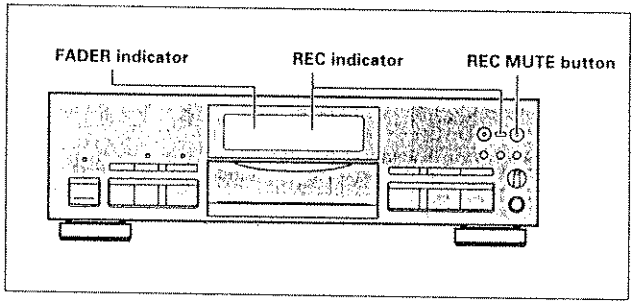
Recording of non-audio signals

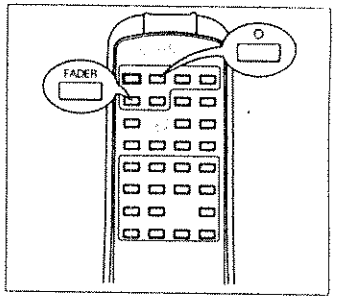
This unit is designed exclusively for recording audio signals. Non-audio signals such as the CD-ROM play signal cannot be recorded. Recording is possible only when the input digital signal is an audio signal.
Even when a digital signal contains a graphic or character information signal, (for example, the CD graphics play signal is input), the graphic or character information is not recorded.

Minimum recording time per track

As the CD specifications dictate that each CD track should be no less than 4 seconds, even when the pause (❚❚) or stop (■) button is pressed in less than 4 seconds after the start of recording, recording does not pause or stop until a 4-second track is created by leaving a non-recorded blank in the insufficient period.
In this case, the next operation cannot be activated until a blank 4-second track has been created.

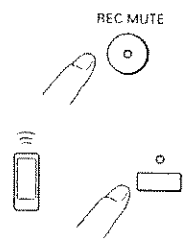
CONVENIENT FUNCTIONS FOR RECORDING (2)





■ Creating a non-recorded blank

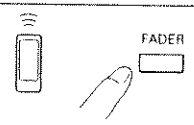
- **To create a blank at the end of a recording:**
  Press the REC MUTE button during recording. The REC indicator blinks and a blank is recorded. The unit automatically enters record-pause mode in about 4 seconds.
- **To create an independent silent track of 4 seconds**
  When the REC MUTE button is pressed in the record-pause mode, a track composed of 4 seconds of silence is recorded independently then the unit returns to the record-pause mode. (This results in the creation of a blank 4-second track.)



NOTE:
If you do not want to create an independent silent track, press the REC MUTE button to create a simple blank before stopping recording (entering the record-pause mode).

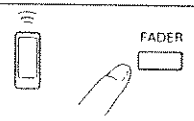
■ Starting recording with fade-in

Press the FADER button in record-pause mode.
Recording starts by gradually increasing the recording level. The FADER indicator blinks in this period.



■ Ending recording with fade-out

Press the FADER button in record mode.
Recording ends by gradually decreasing the recording level. The FADER indicator blinks in this period. Recording ends in about 5 seconds after the button is pressed.



■ Ending disc recording with fade-out

When the remaining recording time falls below 3 seconds, fade-out starts automatically and recording is ended.
This prevents a sudden interruption of sound during playback of the recorded disc.

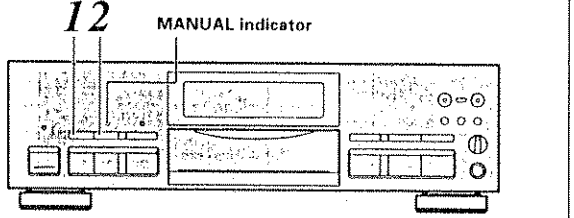
■ Preventing recording of unnecessary blanks

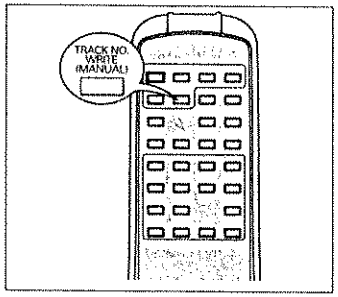
During digital-source recording:
When the digital audio signal input has been interrupted for about 30 seconds during recording, recording stops automatically and the unit enters the record-pause mode.
This prevents recording of unnecessary blanks.

In case record-pause mode lasts for a long period

When the record-pause mode of normal or synchro recording has lasted for more than about 10 minutes, the record-pause mode is canceled automatically and input monitoring starts.

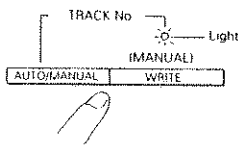
CONVENIENT FUNCTIONS FOR RECORDING (3)





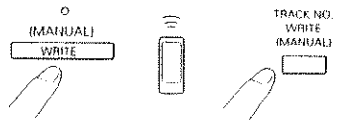
■ Manual writing of track number

1 **Press the TRACK NO. AUTO/MANUAL button so that the (MANUAL) indicator lights.**



- The (MANUAL) WRITE button is defeated while the (MANUAL) indicator is not lit

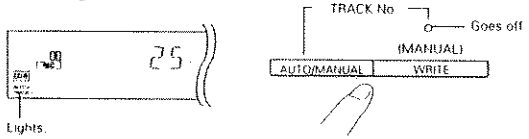
2 **Press the (MANUAL) WRITE button at the position where it is required to renew the track number during recording.**



- The track number can be renewed by pressing the (MANUAL) WRITE button when recording has elapsed for 4 seconds or more.
- Once the track number has been written, it cannot be modified or changed later.

■ Automatic writing of track number

1 **Press the TRACK NO. AUTO/MANUAL button so that the (MANUAL) indicator is not lit but that the AUTO TRACK indicator lights.**



- During recording, the track number is automatically renewed by detecting the track changes based on the input musical signal and digital sub-code signal.
- If the space between tracks is extremely short, the track number may not be advanced.

CAUTION

In case of analog-source recording, if a track contains a section where the level is too low to be sensed on the level meter, track numbers may sometimes be written incorrectly.
To prevent this, we recommend the use of the manual writing function with such a recording.

■ Automatic selection of track number write mode

When the analog-source input is selected, manual track number write mode is selected automatically.
When a digital-source input is selected, automatic track number write mode is selected automatically.

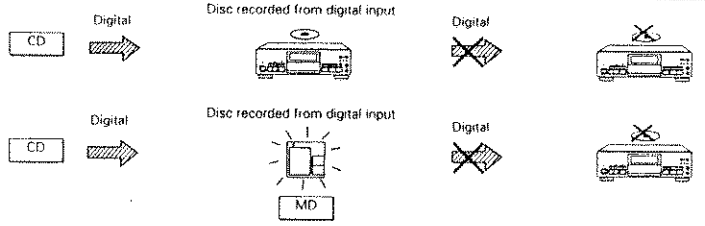
SCMS

SCMS (Serial Copy Management System)

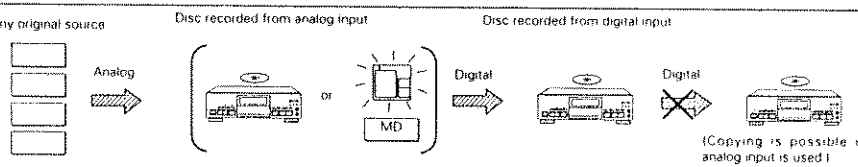
SCMS is the function for preventing disorderly copying by adding copy inhibit information to the digital signals. This system is basically intended to allow only one digital copy operation from the original source (CD, etc.).

Instances in which copying is inhibited

1 With a CD disc or MD music disc which is protected by copyright, digital recording is possible only for one generation.



2 With a disc recorded using analog input, digital recording is possible only for one generation regardless of the original source.



Checking the recording permission/inhibition condition

1 **Press the INPUT SELECTOR button.**

- You can also check for permission by pressing the REC ● button.

2 **Play the source player.**

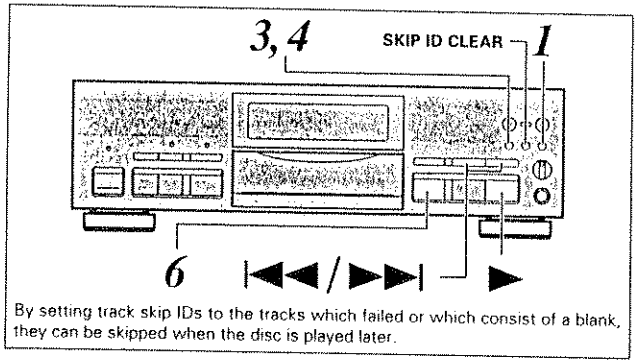
- "CAN NOT" and "COPY" are displayed if the copy inhibit signal is detected in the source being played back.

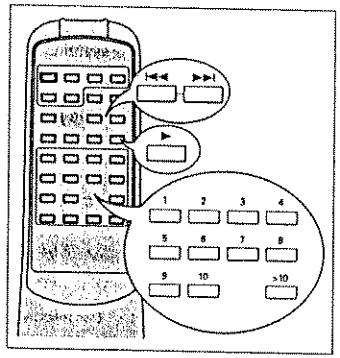
In case a copy inhibit signal is detected during recording

Recording pauses and "CAN NOT" and "COPY" are displayed when the copy inhibit signal is detected in the digital signal being recorded. Recording is continued if copying is permitted again.

SKIPPING UNDESIRED TRACKS

Recording of skip ID setting data

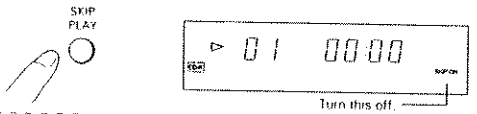




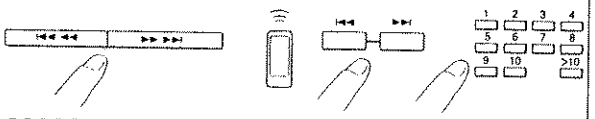
By setting track skip IDs to the tracks which failed or which consist of a blank, they can be skipped when the disc is played later.

■ Setting skip ID to a track (Track skip)

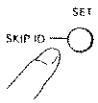
1 **Press the SKIP PLAY button to turn the SKIP ON indicator off.**



2 **Play the track to be skipped.**
Select it with the numeric buttons or a track search button (|◀◀ or ▶▶|) of the remote control unit.



3 **Press the SKIP ID SET button.**



"SKIP" and "SET?" are displayed alternately.

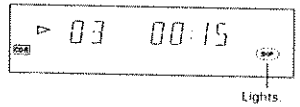
4 **To set the skip ID, press the SKIP ID SET button again.**

5 **Skip IDs can be set to other tracks by repeating steps *2* to *4* for each of them.**

6 **After having set the required skip IDs, press the OPEN/ CLOSE (▲) button.**

- Skip IDs cannot be set or cleared with CD discs or finalized CD-R discs.
- With a CD-R disc which does not contain skip IDs, the SKIP ON indicator will not light even when the SKIP PLAY button is pressed.

- If skip IDs have already been set, the SKIP indicator lights on the display.



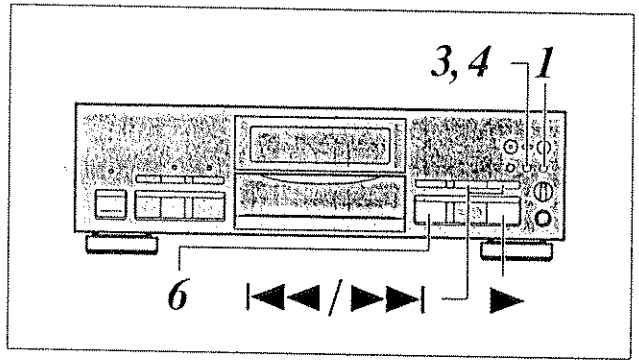
- When the track search button (|◀◀ or ▶▶|) is pressed while "SKIP" and "SET?" are displayed, tracks to which the skip IDs are not set will be played in order of track numbers.
- The selected tracks play back repeatedly.

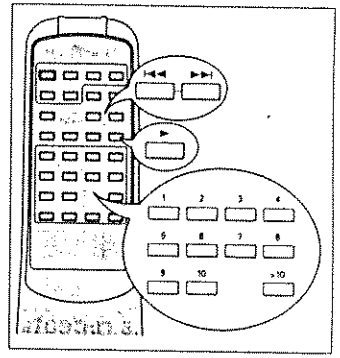
- The skip ID is set by the second press.
- When the play (▶) button or SKIP ID CLEAR button is pressed during the setting operation, the setting mode is canceled.
- When an attempt is made to set or clear more skip IDs than possible, "*FULL*" is displayed and no more changes are possible.
- When the button is pressed to remove the disc, the skip ID setting data is recorded on the disc. At this time, "OPEN" blinks for a few seconds, and the tray opens after the skip ID setting data has been recorded.

CAUTION:
Skip IDs can be set or cleared for up to a total of 21 tracks.
If skip IDs are set or cleared repeatedly, the number of tracks available for track skip IDs will decrease.
Skip IDs cannot be set or cleared with CD discs or finalized CD-R discs.

SKIPPING UNDESIRED TRACKS

Recording of skip ID clear data

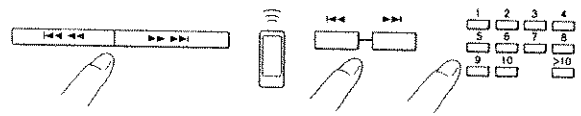




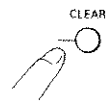
■ Clearing skip ID of a track

1 **Press the SKIP PLAY button to turn the SKIP ON indicator off.**

2 **Play the track which is not to be skipped.**
Select it with the numeric buttons or a track search button (|◀◀ or ▶▶|) of the remote control unit.



3 **During playback of the track which is not to be skipped, press the SKIP ID CLEAR button.**



"SKIP" and "CLEAR?" are displayed alternately.

4 **To clear the skip ID, press the SKIP ID CLEAR button again.**

5 **Skip IDs can be cleared from other tracks by repeating steps *2* to *4* for each of them.**

6 **After having cleared the required skip IDs, press the OPEN/ CLOSE (▲) button.**

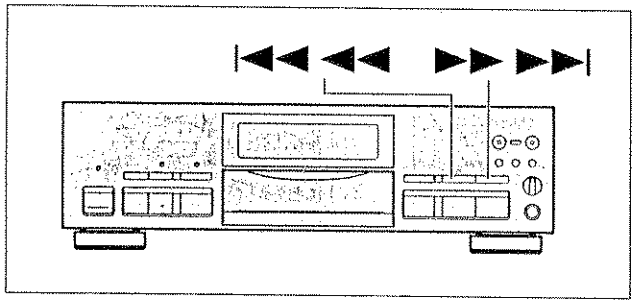
- Skip IDs cannot be set or cleared with CD discs or finalized CD-R discs.

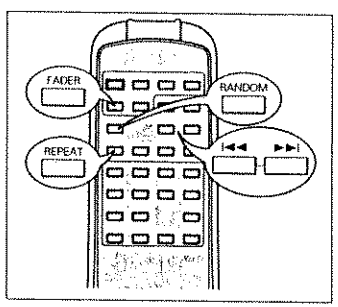
- When the track search button (|◀◀ or ▶▶|) is pressed while "SKIP" and "CLEAR?" are displayed, tracks to which the skip IDs are set will be played in order of track numbers.
- The selected tracks play back repeatedly.
- If you press the SKIP ID CLEAR button during playback of a track without a skip ID, the unit searches for the nearest track with a skip ID and starts playback.

- The skip ID is cleared by the second press. To cancel the clearing mode, press the play (▶) button or SKIP ID SET button.

- When the button is pressed to remove the disc, the skip ID clear data is recorded on the disc. At this time, "OPEN" blinks for a few seconds, and the tray opens after the skip ID clear data has been recorded.

PLAYBACK





■ Playing tracks repeatedly (Repeat playback)

Press the REPEAT button of the remote control unit.

- Pressing once initiates 1-track repeat and the REP-1 indicator lights.
  In this mode, the track being played is played repeatedly. This is possible in normal play, programmed play and random play modes.
- Pressing twice initiates all-track repeat and only the REP indicator lights. In this mode, all tracks are played repeatedly.
  - In normal play mode, all tracks on the disc are played repeatedly (all-track repeat).
  - In programmed play mode, all tracks in the program are played repeatedly in the order they are programmed.

■ Checking the playing time of each track (1-track time display)

When the ►►I button is pressed in stop mode, each press displays the playing time of each track in order of track numbers. Pressing the I◄◄ button displays the playing time in the reverse order.

- The SKIP indicator lights with tracks to which the skip IDs have been set.

■ Fade-in/fade-out during playback

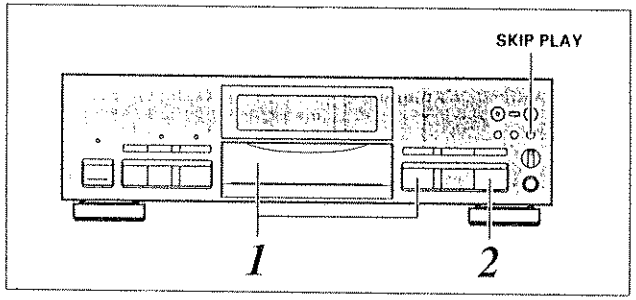
- When the FADER button is pressed during pause, playback restarts with fade-in.
- When the FADER button is pressed during playback, fade-out starts and playback pauses after it.

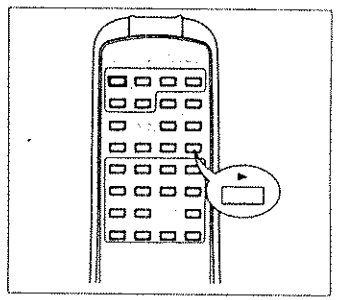
- The fade-in and fade-out periods are both about 5 seconds.
- Fade-in and fade-out are not applied to the digital outputs.

■ Playing tracks in the order selected by the player (Random playback)

Press the RANDOM button of the remote control unit.

SKIPPING UNDESIRED TRACKS (SKIP PLAYBACK)



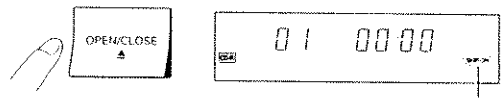


Skip playback

By setting skip IDs to the tracks which you do not want to play, these tracks can be skipped when the disc is played.

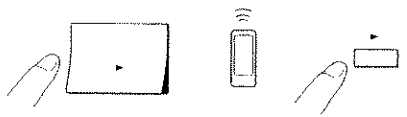
■ Skip playback procedure

1 Load a disc containing the recording of skip ID data.



- In case the disc contains skip ID data, the SKIP ON indicator lights automatically.
- In case the disc does not contain skip ID data, the SKIP ON indicator does not light.

2 Press the play (►) button.



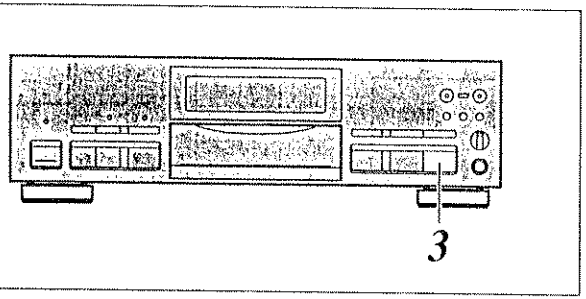
- The disc is played by skipping tracks to which skip IDs have been set.

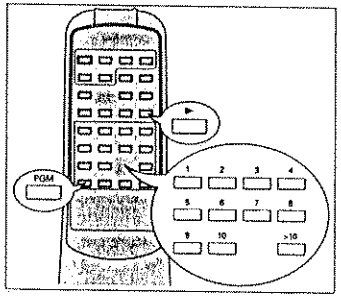
■ In case skip playback is not required

Discs containing tracks to which track skip IDs have been set can also be played without skipping them. Just press the SKIP PLAY button to turn the SKIP ON indicator off before playing the disc.
The SKIP PLAY button is not accepted if the disc does not contain skip ID data.

NOTE:
Skip playback is not possible with an ordinary CD player which does not incorporate the skip function.

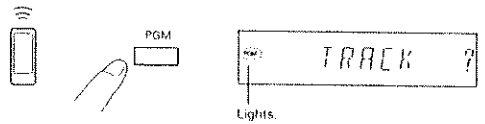
PLAYING TRACKS IN THE DESIRED ORDER (PROGRAMMED PLAYBACK)





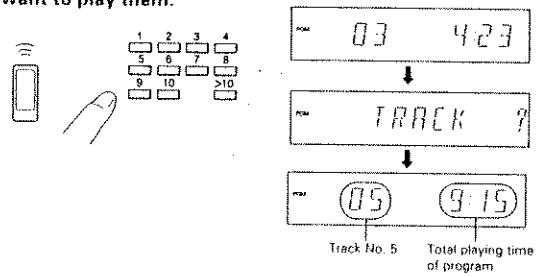
■ Programming tracks

1 **Press the PGM button.**



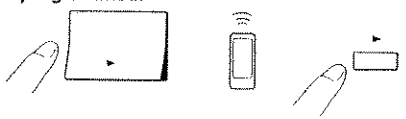
- The PGM indicator lights.

2 **Using the numeric buttons, select the tracks in the order you want to play them.**



- If the current mode is stop mode, each track can also be programmed by selecting its track number with the ⏮◀ or ▶⏭ button and pressing the PGM button.
- If the pause (⏸) button is pressed during programming in stop mode, a pause is programmed. (It cannot be programmed as the first step of a program.)
- Up to 24 tracks can be programmed. Pause is also counted as a track.
- If the total playing time of the programmed tracks is 100 minutes or more, the total playing time is not displayed.

3 **Press the play (►) button. The tracks are played in the order they are programmed.**



- Even during programmed playback, tracks can be added to the program by selecting them with the numeric buttons.

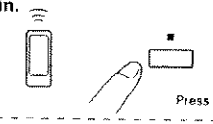
■ Program reservation

If tracks are programmed by pressing the PGM button during normal playback, the programmed tracks will be played from the beginning automatically after normal playback has completed.
Programmed playback can also be started from the beginning by just pressing the play (►) button before normal playback completes.

■ Clearing the entire program

The program can be cleared with either *A* or *B* below.

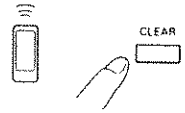
A **Press the stop button to stop programmed playback, then press the stop button again.**



B **Press the OPEN/CLOSE button.**

■ Clearing a track from the program

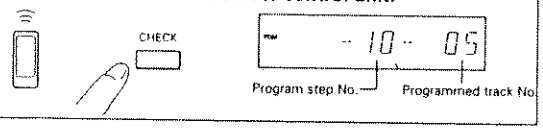
Press the CLEAR button of the remote control unit.



- Each press clears the newest track in the program.
- If the button is pressed during programmed playback, the tracks after the track being played can be cleared.

■ Checking the programmed tracks

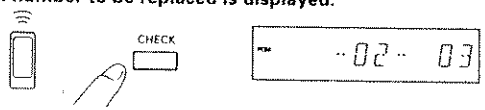
Press the CHECK button of the remote control unit.



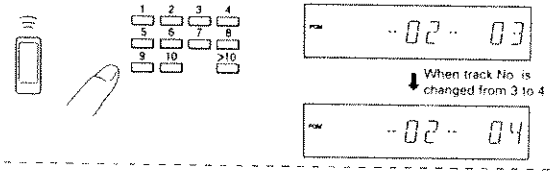
- This operation is available in stop mode and after tracks have been programmed. If the programmed tracks are being played, stop playback before proceeding to this operation.
- Each press displays the track number programmed for each step of the program. When the button is pressed while the last step of the program is displayed, "00" is displayed. Press again to display the first program step.
- This operation is available in stop mode and after tracks have been programmed. If the programmed tracks are being played, stop playback before proceeding to this operation.

■ Replacing a track in the program

1 **Press the CHECK button of the remote control unit the required number of times until the program step with the track number to be replaced is displayed.**



2 **Select the new track number with the numeric buttons.**



- The track number can also be selected with the ⏮◀ or ▶⏭ button.

3 **Other tracks can also be replaced by repeating steps *1* and *2*.**

CHARACTER MESSAGE LIST

Message	Description	Ref. Page
OPEN	The tray is being opened.	p. 16
CLOSE	The tray is being closed.	p. 16
"SET" "UP"	The unit is performing initial set-up for recording. Please wait a while.	
"TOC" "READ"	The unit is reading the TOC of the disc. Please wait a while.	
1-SYNC	The unit is standing by for 1-track automatic digital recording. The recording will start in synchronism with the start of the player.	p. 18
AL-SYNC	The unit is standing by for all-track automatic digital recording. The recording will start in synchronism with the start of the player.	p. 19
FINAL?	Will you finalize the disc? If you want to finalize it, press the FINALIZE button.	p. 23
MONI	The unit is monitoring the input selected with the input selector.	p. 17
"INPUT" "CD" (MD, DAT, DCC)	The unit displays the source it is monitoring (for CD, MD, DAT, and DCC).	p. 17
"TRACK ?"	The current operation is the track programming operation. Select a track with the numeric buttons or ⏮◀ (or ▶⏭) button.	p. 34
"SKIP" "SET?"	The current operation is the track skip setting operation. If you want to skip a track, select it with the SKIP ID SET button.	p. 30
"SKIP" "CLEAR?"	The current operation is the track skip clear operation. If you want to clear the skip designation of a track, select it with the SKIP ID SET button.	p. 31
"PIONEER" "CD-R"	The current operation is the store-front demonstration. The demonstration stops when any key or control is operated. If no key or control has been pressed for about 3 minutes after the demonstration was stopped, it will start again. The demonstration mode can be initiated by pressing the POWER button and the track search button [⏮◀◀] within 1 second after turning on the power. To cancel the demonstration mode, press the POWER button while in the power standby mode then immediately press the track search button [▶▶⏭]. (The demonstration will not restart automatically.)	p. 39

In addition to the above, other character messages are also displayed if the unit detects trouble during use.
For other character messages than above, refer to "Self-diagnostics function" on page 38.

INDEX

Term	Function	Ref. Page
CD-R disc:	Compact Disc - Recordable.	p. 8
SCMS:	System for restricting personal recording (home-use recording) for copyright protection.	p. 29
Skip:	Refer to "Skipping undesired tracks".	p. 30, 31
Skip ID:	Identification which sets or cancels skipping of undesired track before disc finalization.	p. 30, 31
Skip ON/OFF:	Switching on/off of the function to skip undesired tracks to which skip IDs have been set.	p. 33
TOC:	Table Of Contents of a disc which allows it to be played on ordinary CD players.	p. 23
Track number updating:	Function which, either automatically or manually, updates the track number of the track being recorded by one.	p. 28
Digital synchro recording (automatic digital recording):	Function which starts/stops recording automatically by detecting the play/stop modes of a digital component.	p. 18, 19
Disc identification:	Operation of checking whether the loaded disc is a CD or CD-R.	p. 16
Disc damage:	Phenomenon with which recording and playback of disc become impossible due to physical shock or power failure during recording.	p. 38
Demonstration:	Special display mode for use in point-of-sale demonstration.	p. 36, 39
Fader:	Function for recording or playing sound by smoothly varying the volume.	p. 27, 32
Finalization:	Operation for making a recorded CD-R disc playable on ordinary CD players.	p. 23
Write-once:	A CD-R disc can be recorded only once and the recording cannot be erased. Recording always starts from the end of previous recording.	
Label side:	The disc side on which letters, etc., are printed.	p. 16
Professional disc (Pro DISC):	CD-R disc for non-consumer use (refer to "consumer disc"). The applications of this disc are not limited.	p. 8
Consumer disc:	CD-R disc designed for recording music for personal entertainment use.	p. 8
Remaining recording time:	Time of the disc's non-recorded section where recording is possible.	p. 26
Total recording time:	Time of the disc's section which has already been recorded onto.	p. 15
RESUME:	Operation initiated in case of trouble in recording, consisting of recovery of the disc to enable next recording.	p. 26, 38
Non-recorded section:	Blank without music signal between two tracks.	p. 27
Recording permitted/ inhibited:	Statuses set with the SCMS, in which digital recording is enabled/disabled respectively.	p. 29

TROUBLESHOOTING

In case of trouble, first check the following list. What seems to be a failure of the unit is sometimes due to imperfect maintenance, defective disc or unaccustomed operation. Such troubles are often remedied by correcting a simple mistake or misunderstanding or by a simple maintenance operation. If your trouble cannot be corrected after checking the following list, please call you nearest PIONEER service center or station.

Self-diagnostics

This unit incorporates a self-diagnostic function.
When it detects trouble during an operation, it displays one of the following messages on the display panel.

Display	Cause	Treatment	Ref. Page
Alternate display of "CHECK" and "DISC"	The disc is stopped due to dirt, stain, scratch or vibration.	Take out the disc and check for dirt, dust, scratch, etc.	page 9
	The disc may be loaded upside down.	Take out and check the disc.	page 16
		If the same messages are displayed again after the disc is reloaded, unplug the power cord and plug it in again. If the same messages are displayed again, please contact a PIONEER authorized service center.	
"CHECK" blinks on display.	A system error occurred perhaps due to noise or static electricity.	Unplug the power cord and plug it in again. If the same message is displayed again, please contact a PIONEER authorized service center.	page 10

Information messages related to recording operation

Display	Cause	Treatment	Ref. page
Alternate display of "CAN NOT" and "COPY".	Digital musical signal containing copy inhibit signal based on SCMS is being input.	Record the source through analog input or record copy-permitted music.	page 29
Alternate display of "CAN NOT" and "REC".	The digital input is interrupted.	Check if the digital input cable is not disconnected and if the power of the source player is on.	page 10
	The source has been recorded with a sampling frequency which cannot be recorded digitally on this unit.	A source which has been recorded with a sampling frequency which cannot be recorded digitally should be recorded using the analog signal input.	page 17
Cyclic display of "CHECK", "INPUT" and "CD?".	The source player was already playing when the DIGITAL SYNCHRO button was pressed.	Stop playing the source player. In a while, "1-SYNC" or "AL-SYNC" is displayed and synchro recording starts.	page 18 page 19
Alternate display of "SET" and "UP".	The unit is making preparations for recording.	Wait until these messages disappear.	
"REPAIR"	Because the disc was left in the unit after recording and the power plug was unplugged later, the track number and recording time data have been cleared without being recorded on the disc.	While "REPAIR" is displayed, the track number and recording time data are repaired by tracking the recorded area. Further recording or finalization is possible whenever the display returns to the previous condition. Tracing of the recorded area takes about 40 minutes if the disc has been recorded fully.	
"REC FULL"	No more recording is possible because the available recording time of the disc has been used fully or 99 tracks have already been recorded on the disc.	Replace the disc with a new one.	
"Pro DISC"	The loaded disc is a CD-R disc without the mark and "FOR CONSUMER" indication.	Load a CD-R disc carrying the mark and "FOR CONSUMER" indication. Take out and check the disc.	page 8

Information messages related to playback operation

Display	Cause	Treatment	Ref. page
"NEW DISC"	A blank disc is loaded. An attempt is made to play a blank disc.	The loaded disc is a blank CD-R disc. Recording is possible but playback is not.	page 8
"NO DISC"	An attempt is made to start playback without loading a disc.	Open the tray and check if a disc is loaded.	page 16
"RESUME"	The unit is resuming an operation. After the power supply is cut off by a power failure or by mistake during recording, the unit enters RESUME mode so that additional recording is possible.	Wait until the message disappears	page 26

TROUBLESHOOTING

Symptom	Cause	Remedy
Power cannot be turned on.	The power cord is unplugged from the power outlet.	Plug the power cord into a power outlet.
	The power is turned off to the component (stereo amplifier, audio time, etc.) to which it is connected.	Turn on the component into which the power cord is connected.
Playback is impossible.	Signal connections are incorrect.	Connect properly as indicated in "Connections with other equipment".
Recording is impossible.	Signal connections are incorrect.	Connect properly as indicated in "Connections with other equipment".
	The CD-R disc in use has been finalized.	Use a non-finalized disc.
	The input selection is incorrect.	Select the input connected to the desired source.
Recorded sound is distorted.	Signal connections are incorrect.	Connect properly as indicated in "Connections with other equipment".
	There is interference from a TV set.	Turn the TV power off or install this unit apart from the TV.
	The disc is damaged or warped.	Use another disc.
	The disc is extremely dirty.	Clean the disc.
Remote control operation is impossible.	The remote control batteries are exhausted.	Replace both of the remote control batteries with new ones.
	There is an obstacle between the remote control unit and main unit.	Remove the obstacle.
	The remote control unit is operated outside the remote controllable range.	Operate in the remote controllable range.
Certain tracks are skipped without being played.	The SKIP PLAY button is set to ON.	Set the SKIP PLAY button to OFF.
Skip playback does not occur.	The SKIP PLAY button is set to OFF.	Set the SKIP PLAY button to ON.
A recorded CD-R disc cannot be played on other CD players.	• The disc has not been finalized after recording. • When such a disc is loaded in the unit, the CD-R indicator lights up. (Refer to page 8.)	Finalize the disc. (Refer to page 23.)
The point-of-sale demonstration is displayed. (See Note)	The track search button was pressed immediately after pressing the POWER STANDBY/ON button to ON. (Activating the demo mode.)	Set the POWER STANDBY/ON button from OFF to ON and immediately press the track search button. The demonstration will not be displayed any more.

Note: This displays certain characters, like PIONEER, SKIP, and PROGRAM, as a point of sale demonstration.

Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

1-800-421-1404

Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SUPPORT DIVISION
P.O. BOX 1760, LONG BEACH,
CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer authorized dealer in Canada to locate the nearest Pioneer Authorized Service Company.
Alternatively, please contact or ship your defective product freight prepaid to one of the following Factory Service locations closest to you:

Pioneer Electronics of Canada, Inc.

Factory Service East
300 Allstate Parkway
Markham, ON L3R 0P2
(905) 479-4411

Factory Service West
13911 Bridgeport Road
Richmond, BC V6V 1J6
(604) 278-1014

For warranty information please see the Limited Warranty sheet included with your product.

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisé Pioneer au Canada pour obtenir le nom de la société de service autorisée Pioneer la plus près de chez vous. Ou encore, veuillez communiquer avec le centre de service en usine Pioneer le plus près de chez vous ou faire parvenir l'article défectueux, port payé, à ce centre.

Pioneer électroniques du Canada, Inc.

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300 Allstate Parkway
Markham (Ontario) L3R 0P2
(905) 479-4411

Service en usine - Ouest
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Richmond (C.-B.) V6V 1J6
(604) 278-1014

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